

Categories have been arranged for alignment with CEN's 2019-2024 [Strategic Plan](#).

1. Provide Value

- Estimated annual cost avoidance to the state across all members: \$17-25 Million
 - \$437,000 web filtering
 - \$6.6 Million for Internet Services compared to NY, MA, RI (E-Rate data applied to all groups)
 - \$10-18 Million for DDoS protections (if contracted individually by members in emergencies)
- DDoS Mitigation / Threat Management
 - 248 mitigated incoming attacks since the last Commission meeting (Sept 9, 2019)
 - 910 mitigated incoming attacks since January 1, 2019
 - Total Volume of dropped (mitigated) traffic: 31.02TB
 - Volume of largest mitigation: 3.74TB
 - Rate of largest Mitigation: 16.45 Gbps
 - Duration of longest Mitigation: 2D 17h 54M
- CT Library Fiber Consortium Project
 - Project to connect libraries through federal E-rate and matching State Library bond funds.
 - Many project sites connect underserved communities where connectivity options have remained relatively unchanged for decades. This project provides high quality service at reasonable costs to bridge gaps in the digital divide and help libraries continue to thrive as community assets.
 - Phase 5: 14 of 18 sites have library/town approval to move forward. New Haven libraries (4) are waiting for final approval
 - The current project across all phases (1–5) will bring total fiber-connected libraries to 168 (including 47 branches), representing 70% of all 239 libraries statewide
 - Total savings on previous 4 funding years is \$1,392,000 (FCC/USAC E-Rate dark finder IRU savings).
 - Preparing bid response to next phase due December 6, 2019.
- New Members/Customers since the last Commission meeting (Sept 9, 2019)
 - Babcock Library - Ashford
 - Grove School
 - Holy Cross High School
 - Sacred Heart Academy
 - Town of Litchfield
 - West Hartford-Bloomfield Health District

2. Ignite Innovation

- Managed Firewall Service <https://ctedunet.net/managed-firewall/>
 - Goal is to provide a high quality, high capacity next generation firewall experience that can scale with member bandwidth growth and provide a front-line defense for our organizations.
 - Incremental growth, 12 members committed, 3 utilizing.
 - Solicitation for a security services sub-contracted firm to provide full monitoring and alert assistance near complete.
- Cloud Connect Service <https://ctedunet.net/cloud-connect/>
 - Goal is to provide connectivity to cloud providers to enable more advanced and robust services at scale to benefit member business and service needs



- In partnership with Internet2, no-cost transport for community anchor institutions to Amazon Web Services, Google Cloud Platform, and Microsoft Azure Express Route
- Since announced in April, four members committed and are in various stages of progress
- Eduroam <https://www.eduroam.us/>
 - Goal is to help with digital divide issues impacting students in learning areas and provide more seamless network access experience for students attending Hartford Magnet Trinity College Academy
 - Tom Dillon helping coordinate activities as CET Infrastructure Advisory Council Chair, with CEN resource and fiscal support
 - Discussions with Metro-Hartford Hartford Information Systems (MHIS) and Trinity College about a pilot to include the school and local library branch
 - Middletown Public Schools, Library, and Wesleyan University making incremental progress in standing up the service
- Other services are in development and will be prioritized based on community feedback
 - <http://bit.ly/CENSurvey19>
 - 143 responses to date. Survey results will be shared with members when complete

3. Foster Collaboration

- CEN Member Town Halls
 - Town halls meetings scheduled throughout the state to further engage with the membership, hosted by member institutions and covering strategy, service updates, Community Training and Future requests, Expanded Member Conference, Question and Feedback
 - Nov. 5 - Hartford, 55 Farmington Ave; 50 attended
 - Nov. 15 - New Haven, SCSU; 25 attended
 - Nov. 22 - Groton, UConn Avery Point, 12 attended
 - Dec. 6 - Fairfield, Fairfield University, 28 registered; <http://bit.ly/CENTownHall-Dec6-FairfieldU>
 - Dec. 13 - Litchfield, EdAdvance, 28 registered; <http://bit.ly/CENTownHall-Dec13-EdAdvance>
- Engagement and Development Advisory Council (EDAC)
 - Chairs: Karen Warren (Wesleyan); Rebecca Osleger (Suffield)
 - [Cyber Defense Clinic](#) - October 3, 2019; hosted at CCSU; 83 members attended
 - Forum on Protecting Communities from Ransomware Attacks; led by Rebecca Osleger (Suffield) and Michael Scott (Middletown), November 19; hosted at CCSU; 42 members attended, discussion included security experts: CEN Members, Homeland Security, CT Intelligence Center (CTIC), CT DESPP Computer Crimes
 - 2019 CEN Annual Conference: May 7-8, Hartford CT <http://bit.ly/CENMemberCon2020>
 - May 7: Pre-conference workshops and training
 - May 8: Main event with our traditional CEN Annual Conference format
 - Accepting session proposals now:
http://bit.ly/CENMemberCon2020_SubmitSessionProposal
 - Planning for 20-year celebration of CEN
- Service Management Advisory Council (SMAC):
 - Chairs: Matt Ross (Farmington Public Schools), Jonathan Garbutt (SCSU)
 - Survey for additional services and prioritization is active: <http://bit.ly/CENSurvey19>
 - Evaluating second CIPA filtering option (in collaboration with TAAC)
 - Assisting with service lifecycle criteria from inception to sunseting
- Technical Advancement Advisory Council (TAAC)
 - Chairs: Ken Ross (Plainville Public Schools and town), Tim Sheets (Yale)



- Developing technical criteria for NextGen CEN network
- Evaluating second CIPA filtering option (in collaboration with SMAC)
- Director Kocsondy
 - Elected as the Secretary of the Quilt Executive Committee <https://www.thequilt.net/about-us/the-quilt-board-of-directors/>
 - Elected to the Northern Crossroads (NoX) Advisory Committee. <http://nox.org> NoX is a regional network managed by MIT connecting members throughout New England.

4. Promote Advocacy

- CAPSS Technology Committee, October 15, 2019
 - Discussion with CAPSS on Cybersecurity, Malware, Ransomware, Phishing, Backups
 - Possible collaboration with CAPSS Tech Committee for 2019-20 for aggregate technology services
- CSDE Performance Matters Forum, October 17, CT Convention Center
 - Douglas Casey and Ryan Kocsondy presented: State Technology Resources and Student Success
- CT Associations of Schools (CAS) Conversations - Cybersecurity Podcast
 - Help with cybersecurity awareness and resources available to CT Schools
 - Roberta Pratt, East Hartford; Douglas Casey, CET; Ryan Kocsondy, CEN
 - <https://storage.googleapis.com/files-gcs.casciac.org/casconversations/Episode14Cybersecurity.mp3>
- Norwalk Public Schools
 - CEN/CET work with SETDA 'K-12 Broadband Leadership 2019' report in April 2019 and Education Super Highway (ESH) resulting in profile of Norwalk PS System
 - <https://www.youtube.com/watch?v=oQacTGRKXM0&feature=youtu.be>
 - Local school elevated to a national scale integration of technology, digital learning, and internet accessibility

5. Enhance Core Resources

- CEN Staff
 - CEN currently has 11 full-time staff members, 6 part-time student workers, and 1 volunteer (1 day /week).
 - Michael Harris, Business Services Supervisor, started November 8
 - Program Administrator: candidate interviews underway
 - Network Engineer position post closed, reviewing applicant pool
- Funding: \$1.5M Bond authorized & allocated to CEN; June 26, 2019 Special Meeting
 - Monies to target the distribution layer of the network that is end of life/end of support.
 - Proof of Concept (POC) Testing with two vendors underway with target decision by mid-January.
 - Note: Federal tariff on network hardware products manufactured in China resulting in a 10-25% increase in equipment costs.
- Policy Review
 - Incremental progress. Plan is to revise / update as needed, circulate to CEN Advisory councils for comment, submit to CET for the June meeting.
- NYC Buildout



- NEREN Collaboration (MA, ME, NH, NY, RI, VT).
- Connectivity into one of the busiest telco areas in the world, increasing CEN's capability and reach.
- Will result in more diverse options and lower commodity Internet rates, commercial peering to reduce costs, backhaul opportunities to Ashburn (VA) and Chicago, and peering partnerships with other Regional Optical Networks (RONs) within the research and education network space.
- Current Status:
 - RFP for IP transit closed, procurement reviewing for compliance, review committee to score in December
 - Agreements for peering exchanges are in procurement contract review; target dates for turnup being negotiated.

